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PERCEPTIONS OF QUALITY OF LIFE, SENSE OF COMMUNITY, AND LIFE SATISFACTION AMONG ELDERLY RESIDENTS IN SCHUYLER AND CRETE, NEBRASKA

Rodrigo Cantarero, James J. Potter and Christina K. Leach (University of Nebraska)

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The purpose of this study is to identify key indicators affecting the elderly population's perception of Quality of Life (QoL) in two rural Nebraska communities--Crete and Schuyler. It also explores QoL indicators affecting their sense of satisfaction with living in the community and their perception of the town's sense of community. The current analysis is based on data obtained in two prior studies conducted by the authors. The results indicate that a majority of the elderly were satisfied. We also corroborated other studies' findings in which stress is negatively related to QoL. Finally, we confirmed a positive relation between strong sense of community and QoL, and the intervening effect of sense of community on the stressors.

Introduction

According to the census, the elderly population in the United States numbered 35.9 million in 2003, an increase of 3.1 million since 1993. By the year 2030, the 65 and over population is projected to number 71.5 million and will represent nearly 20 percent of the total U.S. population (U.S. Census Bureau). Due to the anticipated increase in this segment of the population, there is an immediate need to research the quality of life (QoL) for the elderly (Bowling, Gabriel, Fleissing & Banister, 2003).

The majority of past research examining the elderlies' QoL has focused primarily on health issues (Hyde, Wiggins, Higgs & Blane, 2003). While health is indeed an important component, it inadequately represents QoL as a whole for the elderly population (Smith, Avis, & Assmann, 1999; Wilhelmson, Andersson, Waern & Allebeck, 2005). As life expectancy increases, more pressure will be placed on professionals and decision makers to address QoL issues (Fry, 2000; National Research Council, 2002) that require us to rethink the way we conceptualize and measure QoL for the elderly (Wiggins, Higgs, Hyde & Blane, 2004).

The purpose of this study is to identify key indicators affecting the elderly population's perception of QoL in two rural Nebraska communities--Crete and Schuyler. It also explores how these QoL indicators affect their sense of satisfaction with living in the community and their perception of the town's sense of community. The current

analysis is based on data obtained in two prior studies conducted by the authors (Potter, Cantarero, Yan, Larrick, & Ramirez, 1996, and Potter, Cantarero, Yan, Larrick, Ramirez & Keele, 2001), covering a number of QoL domains, which we subsequently review.

Literature Review

Defining Quality of Life

A first step in addressing QoL for the elderly is to establish a definition and identify indicators that measure the concept. There are many who have attempted a definition of QoL (WHOQOL, 2006; Beaumont & Kenealy, 2004; Higgs, Hyde, Wiggins & Blane, 2003; Skevington, 2002). Although there are differences, most agree that the concept of QoL encompasses many domains and is not confined to one element of a person's life. For example, researchers have said QoL is: "intrinsically multi-factorial" (Beaumont & Kenealy, 2004, p.764); "the complex interaction of the various elements present in a person's life" (Higgs et al., 2003, p.243); "a rich interplay between multiple dimensions or domains" (Skevington, 2002, p.136).

Quality of Life for the Elderly

For those in the health care field, health factors are sometimes the sole measurement of QoL when related to the elderly (Hunt, 1997). The problem with this approach is that it neglects the "experiences of people in old age" and tends to reduce the elderly to "a medical or a social policy category" (p.187). Other researchers agree that QoL measures focusing only on health factors provide an inadequate account of individual QoL because of the distinct difference between QoL and health status (Smith et al., 1999; Spiro and Bosse, 2000). Hyde, Wiggins, Higgs & Blane (2003) suggest the use of non-health proxies to develop a broader measure of QoL based on the degree to which human needs are satisfied. "(S)ocial relations, functional ability and activities may influence the QoL of elderly people as much as health status" (Wilhelmson et al., 2005, p.590).

Quality of Life Domains Defined by the Elderly

In studies where people 65 and older were asked to define QoL (Bowling, Gabriel, Fleissing & Banister, 2003; Gabriel & Bowling, 2004), it was found that social relationships, support, safety, access to facilities and services, and good health were the most common themes related to good QoL. Relationships with family, relatives, friends and other people were most important, with finances, standard of living and housing as close seconds. Reported "bad" QoL related mainly to declining health, loneliness and the inability to perform tasks previously handled by a deceased spouse.

Positive response was associated with health maintenance and living in areas that facilitated social relationships, neighborliness and mobility (good transport facilities).

Smith, Sim, Scharf & Phillipson, (2004) agrees that individuals' perception of their own health, ability to manage financially, feeling of poverty over time and feelings of loneliness were important determinants of the QoL of people over 60. Bajekal, Blane, Grewal & Karlsen (2004) concluded that, besides social networks and community participation, wealth, housing conditions and health, the quality of neighborhood, availability of local amenities, problems with crime and the physical environment were influential in determining QoL.

Stressors and Quality of Life

Both Abbey & Andrews (1984) and Pittman & Lloyd (1988) found that stress relates strongly and negatively to self-reported QoL. No other life domain including health, personal life and work "related as highly to the psychological variables" (Abbey & Andrews, 1984, p. 29). Stressors are negatively related to psychological wellbeing, and resources are positively related to psychological wellbeing. People experiencing stress or depression reported less contentment with their lives and lower QoL than those reporting low levels of stress.

Ensel & Lin (1991, p.334) found that social resources help reduce stress and "play a primary role in mediating the detrimental effects of social stressors on distress." In another study of elderly women age 73-78 (Young, Russell & Powers, 2004), sense of neighborhood positively and strongly correlated with social support and less stress. The sense of neighborhood scores increased with the number of years lived in their present home. Also, women reporting no physical activity had a lower sense of neighborhood.

Pearlin & Skaff's (1996) research found sources of stress for the elderly include lack of transportation, physicians and medical care, recreational facilities and other amenities as well as financial problems. He also found that as people aged they may become "increasingly wary of the quality of their community and neighborhood environments, thus, they may find reason to be apprehensive about their safety, even in the objective absence of increased dangers" (p.243). Finally, he reported that social support resources may help buffer these stressors.

Sense of Community

Community can be defined in both a territorial (neighborhood, city, town) or relational sense (spiritual communities, volunteer groups or people with common

interests) (Prezza & Costantini, 1998; Bramston, Pretty & Chipuer, 2002a).

Cohrun (1994) utilized four key components identified by McMillan & Chavis (1986) to better understand sense of community: membership (feeling of belonging), influence (the ability to express freedom), integration and fulfillment of needs (sense of togetherness in a community), and shared emotional connection (common history of members in a community).

Cohrun (1994) concluded that people who have a strong sense of community feel as though they belong in their neighborhoods, that they have some control over what happens in the area and that their needs can be met by collaborating with other neighbors with whom they have a shared history.

One of the strongest predictors related to sense of community is neighborhood relations and community involvement (Bramston, Bruggerman & Pretty, 2002b). Sense of community is also related to life satisfaction and loneliness (Prezza, Amici, Roberti & Tedeschi, 2001).

Other sense of community studies have concluded that neighborhood relations are stronger for women, those with less education, those living in the community for many years and for members of groups or associations. Predictors of sense of community can include years of residence in a specific community, being married, group participation and area of residence (Prezza *et al*, 2001). Finally, in a study of the elderly, Liu & Besser (2005) found that there is a strong relation between formal organization ties and sense of community for the elderly population.

In summary, there is substantial support for the idea that QoL for the elderly encompasses many variables. The most influential variables, as reported by the elderly themselves, include: health status, having good social relationships, access to local amenities, living in a safe, friendly neighborhood, having access to transportation, having the financial capacity to meet needs, and having the ability to participate in the community.

Stress is also negatively related to QoL and the primary stressors for the elderly include: lack of transportation, financial problems and access to local amenities. Many of these stressors are the same variables the elderly identified as having an impact on their QoL. Finally, prior research indicates that the presence of a strong sense of community and neighborhood, including membership, influence, integration, and shared emotional connections are related

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positively to QoL and can help mitigate stressors affecting the elderly.

Research Objectives

The paper seeks to identify those QoL indicators/ domains which are more influential for small town elderly populations, by exploring the case of Crete and Schuyler, Nebraska - towns which are experiencing large and rapid influx of mostly culturally diverse (Hispanic/Latino) population, and which we believe are representative of many in the Midwest. The study will also explore the relationship between the QoL and the elderlies' overall satisfaction with life in their community, as expressed by their desire to continue living in their community as long as possible. Finally, we explore how the elderlies' perception of the town's sense of community intervenes between these two.

Community Profiles

Schuyler and Crete, Nebraska, population 6,332 and 5,364, are two of several small towns in Nebraska experiencing rapid growth over the last 15 years (24.5% and 14.2% respectively, 1990 to 2000), fueled by a large immigration of mostly Hispanic/Latinos (who grew from 0.8% and 4.0% of the population to 13.5% and 45.1% respectively), attracted to the food processing manufacturing located in town. Median age is around 30, and about 30% of households are elderly (65+) (U.S. Census 2000).

Both of these towns are examples of similar small rural communities throughout the Midwest that are also experiencing a large influx of immigrant population particularly among Hispanics, which originate new challenges and opportunities. This study's importance lies on its reflection of QoL issues affecting similar communities across the Midwest, and on the expected continued increase of the elderly population over the next decades which will make QoL issues for this age group more prominent.

Methodology

Data

Data on perception of QoL was collected in Crete (1996) and Schuyler (2003) via face-to face interviews of newly arrived (lived in the community less than five years) and long-term (15 years or more) residents 19 years of age or older, from randomly selected blocks (using census block information and local key informants), which were then canvassed to find and solicit interviews from eligible household residents (one per household, no more than five per block). The interviews were done in English or Spanish, depending on the preference of the respondent.

A total of 183 interviews were conducted utilizing a 5 point Likert scale (1 = very dissatisfied/totally disagree, 3 = neutral, 5 = very satisfied/totally agree).

Sample

We chose a sub-sample of those respondents age 60 and older (n=46) from the 183 interviews collected to represent the "elderly" population, in order to increase the statistical significance of the sample. Past studies have defined the elderly population anywhere from 55-75 years of age.

Elderly Population Characteristics

The mean age of the respondents was 71.8 years; 60.9% female, 39.1% male. The mean length of time the respondents had lived in the community was 32.2 years. Only seven of the 46 respondents had lived in the community less than five years, and over half of them had lived there for over 25 years, a majority in the same residence (mean of 20.4 years).

A substantial proportion of respondents lived by themselves (41.3%), half (50%) were married and 39.1% were widowed. All of the respondents reported their racial backgrounds as white; 4.4% considered themselves Hispanic or Latino. Two-thirds (65.8%) of households had annual incomes before taxes between \$10,000-\$29,999, followed by 15.8% between \$30,000-\$39,999, 15.7% between \$40,000-\$69,999, and 2.2% less than \$10,000. Most (83.3%) respondents were retired. Only 26.1% has less than a high school education.

Measures

Guided on prior work noted in the literature above, we measured quality of life using the following set of variables or indicators:

Quality of Life Indicators

1. Perception of current health
2. Access to public transportation
3. Housing satisfaction
4. Perception of neighborhood conditions
5. Perception of safety
6. Perceived support from friends
7. Access to basic services
8. Finances
9. Stress

Housing satisfaction, perceptions of their neighborhood, safety, and stress were calculated using a composite index that averaged (mean) the responses of several conceptually related questions.

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Although sense of community is a broad concept that can take different meanings (Prezza & Constantin, 1998; Bramston et al., 2002a; Bramston et al., 2002b), for our purposes community refers to the town of residence (Crete or Schuyler), and the term sense of community is determined by a single composite index averaging seven conceptually related variables (to insure a full range of meanings):

Sense of Community Index

1. Sense of community change
2. Economic condition of the residents
3. Sense of community in the town
4. Crime conditions
5. Well-being of business
6. Cooperation among neighbors
7. Availability of employment in the community
8. Social organizations support

Finally, the concept of overall satisfaction with life in their community is determined by a question that specifically asked the respondent's desire to continue living in their community for as long as they could. All composite variable indexes were examined for reliability using Cronbach's Alpha test (value > .7).

Results

The quality of life domains identified in the literature and tested for level of satisfaction in the two research communities were health, access to transportation, housing satisfaction, neighborhood satisfaction, safety, finances, friends network, basic services, and stress. A frequency distribution based on a 5 point Likert scale was examined and the percentage of the answers that expressed satisfaction (answered higher than 3 on a scale that went from 1 strongly disagree/very dissatisfied, 3 neutral, and 5 strongly agree/very satisfied) were aggregated and are presented in Table 1. Most elderly residents expressed satisfaction with the quality of life domains, except for transportation services (only 37.8% expressed satisfaction with the access to convenient public transportation). However, it should be noted that a large proportion of the elderly is likely to still own and drive a car (small towns less threatening to elderly drivers).

We also examined elders' perception of the sense of community in their town and their overall sense of satisfaction via their desire to continue living in town. Although only 57.9% of the respondents expressed satisfaction with the town's sense of community, 70% expressed their desire to continue living in the community as long as possible.

Next, we examined the correlation between sense of community and the quality of life domains, as well as the possible mediating effect between quality of life domains and their overall level of satisfaction with community life.

Table 2 shows that only the friend's network domain did not test statistically significant. All the other QoL domains tested significant, and the correlation strength ranged from weak—income, transportation, stress (inverse), services, safety—to moderate—housing and neighborhood satisfaction.

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The correlation between quality of life domains and overall sense of community satisfaction (wanting to continue living in town as long as possible) shows fewer statistically significant correlation, and weaker correlation strength, except for stress. Sense of community perception, although statistically significant, correlated weakly with overall sense of community satisfaction.

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To test the possible mediating effect of sense of community on the relationship between quality of life and overall sense of satisfaction with the community, we proceeded to run a partial correlation between QoL and OCS, holding for SoC. The results (Table 3) reveal a slight drop in the strength of the correlation of the stress index, and a more pronounced reduction for the neighborhood satisfaction index and the housing satisfaction index, the later becoming statistically insignificant. This would seem to indicate that sense of community plays an intervening role between these quality of life domains and the overall sense of community satisfaction among the elderly.

Discussion And Conclusion

Some limitations of the study to consider are the small sample size (n=46), the time lag between the two surveys (6 years), and the large immigration experienced, which would differentiate them from most Midwestern rural towns.

Life seems to be good for a majority of the elderly population in the two communities, as indicated by their satisfaction with quality of life indicators, with the exception of public transportation, and their desire to continue living in their community as long as possible. We also corroborated other studies' findings (e.g., Abbey et al., 1984; Pittman et al., 1988; Ensel & Lin, 1991) in which stress are negatively related to QoL. We also found confirmation to the positive relation between strong sense of community and QoL, and the intervening effect of sense of community on the stressors (e.g., Young et al., 2004; Cohrun, 1994; Prezza et al., 2001; Liu & Besser, 2003).

Building Sustainable Communities

Table 1. Satisfaction with Quality of life

<u>Quality of life Domain</u>	<u>% who expressed satisfaction (answered agree)</u>
Stress*	78.7
Safety	82.5
Neighborhood	89.1
Housing	90.2
Health	64.5
Network	83.6
Services	74.3
Transportation	37.8
Sense of Community	57.9
Continue to live in community	70.0

* reversed scale—those expressing disagreement with question about stress.

Table 2. Correlation between Quality of life Domains, Sense of Community (SoC) and Overall Community Satisfaction (OCS)

<u>Quality of life Domain</u>	<u>SoC Correlation Coefficient</u>	<u>OCS Correlation Coefficient</u>
Stress	-.214*	-.388**
Safety	.359**	.138
Neighborhood	.580**	.324**
Housing	.404**	.223**
Health	.294**	.136
Network	.107	.149
Services	.219*	.043
Transportation	.184*	.108
Income	-.191*	-.006
Sense of Community		.244**

* Correlation significant at 0.05 level

** Correlation significant at 0.01 level

+ Dummy variable 1 = male

Table 3. Partial Correlation between Quality of life Domains and Overall Community Satisfaction (OCS) holding for Sense of Community (SoC)

<u>Quality of life Domain</u>	<u>OCS Correlation Coefficient</u>
Stress	-.355**
Safety	.055
Neighborhood	.230**
Housing	.140
Health	.069
Network	.127
Services	-.011
Transportation	.067
Income	.043

* Correlation significant at 0.05 level

** Correlation significant at 0.01 level

+ Dummy variable 1 =

We also found that satisfaction with quality of life domains and the overall satisfaction with life in the community (desire to continue living in town) is dampened by the diminished sense of community--which was found less than desirable for slightly less than one-half of the study population. This later indicator might be a reaction to the rapid and large influx into the community of mostly culturally different new residents, which might generate some fear and mistrust among some of the town's elderly. Overall, we expect this will be reduced as the community accommodates the new arrivals, and the long-term residents of the town become accustomed and more comfortable with their new residents. This, of course, would be a very interesting follow-up study.

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